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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:	Expedited Procedure Under 37 CFR 1.116
JAMES W. CASPER, et al.	
Serial No.: 09/868,805	Group Art Unit: 1762
Filed: June 21, 2001	Examiner: W.P. FLETCHER, III
For: COATING COMPOSITION	Case No.: OC-527

APPEAL BRIEF PURSUANT TO 37 CFR § 1.192

Hon. Commissioner of Patents and Trademarks
Washington, DC 20231

Sir:

The Appellants file this Appeal Brief with the Board of Appeals and Interferences from a Final Office Action mailed on October 30, 2002 in which the Examiner finally rejected claims 1-15, 19-20, and 22-24 in the above-identified application. The Appeal Brief supports a Notice of Appeal filed by certified mail on February 14, 2003. As required by 37 CFR § 1.192, the Appeal Brief is being filed in triplicate within the allotted time period. Please charge the requisite filing fee of $320.00 to Deposit Account No.16-2025.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231

on March 31, 2003 (Date) Maria Edwards (Signature)

Maria Edwards
Typed or Printed Name of Person Signing Certificate

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(1) REAL PARTY IN INTEREST

The real party in interest is PPG Industries Ohio, Inc., a corporation of the state of Delaware. The inventors assigned their rights to the present invention to PPG Industries Ohio, Inc. in an Assignment Document mailed on June 21, 2001 which is duly recorded at the United States Patent and Trademark Office at Reel/Frame: 012050/0794.

(2) RELATED APPEALS AND INTERFERENCES

The Appellants and the Appellants' legal representative are not aware of any related appeals or interferences.

(3) STATUS OF THE CLAIMS

Claims 1-15, 19-20, and 22-24 are pending. Claims 1-15, 19-20, and 22-24 are under Final Rejection. The Final Rejection is being appealed. The pending claims are attached hereto as Appendix A.

(4) STATUS OF AMENDMENTS

The Applicants mailed an Amendment After Final on November 27, 2002. The proposed amendments were entered, and an Advisory Action (Paper No. 10) was mailed on December 9, 2002. In the Advisory Action, the Examiner stated that the Amendment After Final failed to place the application in condition for allowance.

(5) SUMMARY OF THE INVENTION

The present invention is directed towards a pigmented solventborne paint pack. As defined in claim 1, the invention is a non crosslinker-containing pigmented solventborne paint pack which can be made into a waterborne coating composition comprising:

i) a solution in an organic solvent of polymer having functional groups and hydrophilic groups; and

ii) a waterborne pigment dispersion comprising pigment dispersed in water in the presence of a pigment dispersant, the waterborne pigment dispersion itself being in dispersion in the solution of the organic solvent.

(6) THE ISSUES

The issues on appeal are as follows: (1) are claims 1-2, 8-14, and 20 anticipated by US Patent Number 5,654,360 ("Palasz"); (2) are claims 3-4 obvious over Palasz in view of US Patent Number 5,391,630 ("Miwa"); and (3) are claims 6-7 obvious in view of Palasz?

(7) GROUPING OF CLAIMS

All of the claims on appeal stand or fall together.

(8) ARGUMENT

A. CLAIMS 1-2, 8-14, and 20 ARE NOT ANTICIPATED BY PALASZ

A rejection under 35 U.S.C. § 102(b) is proper when one reference teaches each and every element of the present invention. See Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1379, 231 U.S.P.Q. 81, 90 (Fed. Cir. 1986).

In this case, the present invention is a non crosslinker-containing pigmented solventborne paint pack which can be made into a waterborne coating composition comprising: (i) a solution in an organic solvent of polymer having functional groups and hydrophilic groups; and (ii) a waterborne pigment dispersion comprising pigment dispersed in water in the presence of a pigment dispersant, the waterborne pigment dispersion itself being in dispersion in the solution of the organic solvent.

As stated on page 3, lines 9-10 of the patent application, the waterborne pigment dispersion (millbase) is dispersed in a solution of the polymer in an organic solvent to form the solventborne paint pack. The solventborne paint pack of the present invention is a classic

"water in oil" emulsion. To make a waterborne coating composition from the solventborne paint pack of the present invention, crosslinker is dissolved in the solventborne paint pack and then the mixture of crosslinker dissolved in solventborne paint pack is dispersed in water. See the present application at page 2, lines 21-23.

In contrast to the present invention, Palasz discloses a water-based coating composition; not a solventborne paint pack. The water-based coating composition of Palasz is comprised of two packs. The first pack is a non-aqueous solution containing a water-miscible organic solvent with less than 5% by weight of water of a silicon-containing polymer having water-solubilising groups, and the second pack of Palasz is a dispersion polymer in dispersion in an aqueous liquid carrier for the dispersion polymer and the coating composition. See claim 1 of Palasz.

Unlike the present invention, a waterborne coating composition is formed when the first pack of Palasz is combined with the second pack of Palasz. At Palasz at col. 2, lines 65-67, it states that a waterborne coating composition is formed when the first pack and the second pack are mixed. The waterborne coating composition of Palasz is a classic "oil in water" emulsion.

As discussed above, to make a waterborne coating composition (the invention of Palasz) from the solventborne paint pack of the present invention, crosslinker is dissolved in the solventborne paint pack and then the mixture of crosslinker and solventborne paint pack is dispersed in water. By dispersing the solventborne paint pack of the present invention (a "water in oil" emulsion) in water, a "water in oil" immersion is transformed into an "oil in water" emulsion (waterborne coating composition).

Clearly, the waterborne coating composition/"oil in water" emulsion of Palasz does not disclose the solventborne paint pack/"water in oil" emulsion of the present invention or a process for making the solventborne paint pack of the present invention. Because Palasz does not anticipate the solventborne paint pack of the present invention, the rejection of claims 1, 2, 8-14, and 20 is improper and should be withdrawn.

B. CLAIMS 3-4 ARE NOT OBVIOUS OVER PALASZ IN VIEW OF MIWA

To establish a prima facie case of obviousness, the United States Patent and Trademark Office must satisfy three requirements. First, the prior art relied upon, coupled with the knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or to combine references. See In re Fine, 837 F.2d 1071, 1074, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). Second, the proposed modification of the prior art must have had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was made. See Amgen, Inc. v. Chugai Pharm. Co. 927 F.2d 1200, 1209, 18 U.S.P.Q.2d 1016, 1023 (Fed. Cir. 1991). Third, the prior art reference or combination of references must be teach or suggest all the limitations of the claims. See In re Wilson, 424 F.2d 1382, 1385, 165 U.S.P.Q. 494, 496 (C.C.P.A 1970).

In the Final Office Action, the Examiner stated that Palasz did not disclose the hydroxyl values of the silicone-containing polymers having hydroxyl functional groups. However, the Examiner said it would be obvious to one of ordinary skill in the art to choose a polymer with a hydroxyl value between 40 and 200 for the silicone-containing polymer taught by Palasz in view of the teachings of Miwa.

In this case, the Examiner has failed to meet the three requirements for a prima facie case of obviousness. Although the Applicants do not believe that the first two requirements have been met, the focus of the argument is on the third requirement.

Even if we assume that (1) there is some suggestion or incentive that would motivate the skilled artisan to modify Palasz and Miwa and (2) the proposed modification of the prior art has a reasonable expectation of success, the combination of Palasz and Miwa does not teach or suggest all the limitations of the claimed invention. For the reasons discussed above, the combination of Palasz and Miwa does not teach or suggest the solventborne paint pack of the

present invention. Therefore, the rejection of claims 3-4 under 35 U.S.C. §103 is improper and should be withdrawn.

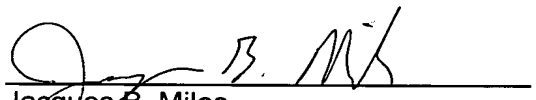
C. CLAIMS 6-7 ARE NOT OBVIOUS OVER PALASZ IN VIEW OF MIWA

Similarly to the above, Palasz does not teach or suggest all the limitations of the claimed invention. As discussed above, there is no teaching or suggestion in Palasz of the solventborne paint pack of the present invention. Therefore, the rejection of claims 6-7 under 35 U.S.C. §103 is improper and should be withdrawn.

(9) CONCLUSION

Because this Appeal Brief sets forth factual and legal bases that support the patentability of the claims on appeal, it is respectfully submitted that claims 1-15, 19-20, and 22-24 are in condition for allowance. Accordingly, it is respectfully urged that the Board of Patent Appeals and Interferences reverse the Examiner's rejection of claims 1-15, 19-20, and 22-24.

Respectfully Submitted,



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Pittsburgh, Pennsylvania
March 31, 2003

APPENDIX

CLAIMS ON APPEAL

1 A non crosslinker containing pigmented solventborne paint pack which can be made into a waterborne coating composition comprising:

i) a solution in an organic solvent of polymer having functional groups and hydrophilic groups; and

ii) a waterborne pigment dispersion comprising pigment dispersed in water in the presence of pigment dispersant, the aqueous pigment dispersion itself being in dispersion in said solution of organic solvent.

2. A paint pack as claimed in claim 1 in which the functional groups are hydroxyl groups.

3. A paint pack as claimed in claim 2 in which the polymer has a hydroxyl value of 5 to 500

4. A paint pack as claimed in claim 3 in which the polymer has a hydroxyl value of 50 to 250.

5. A paint pack as claimed in claim 1 in which the hydrophilic groups are carboxylic acid groups or amine groups.

6. A paint pack as claimed in claim 5 in which the hydrophilic groups are carboxylic acid groups and the polymer has an acid value of 20 to 250.

7. A paint pack as claimed in claim 5 in which the hydrophilic groups are amine groups and the polymer has an amine value of 20 to 250.

8. A paint pack as claimed in claim 1 in which the polymer is vinyl addition polymer, a polyester, a polyurethane, a mixed polyester-polyurethane or an epoxy polymer.

9. A paint pack as claimed in claim 8 in which the polymer is a vinyl addition polymer, a polyester, a polyurethane or a mixed polyester-polyurethane.

10. A paint pack as claimed in claim 9 in which the polymer is a vinyl addition plymer.

11. A paint pack as claimed in claim 10 in which the polymer has a theoretical glass transition temperature (Fox Tg) of –30 to 80°C.

12. A paint pack as claimed in claim 11 in which the polymer has a theoretical glass transition temperature (Fox Tg) of –10 to 50°C.

13. A paint pack as claimed in claim 1 in which the polymer has a number average molecular weight as measured by gel permeation chromatography of 700 to 10,000.

14. A paint pack as claimed in claim 13 in which the polymer has a number average molecular weight of 1,000 to 4,000.

15. A paint pack as claimed in claim 1 in which the polymer has an acid value of up to 50.

16. A solventborne activated paint pack as claimed in claim 1 further comprising a crosslinker which dissolved in the organic solvent.

17. A solventborne activated paint pack as claimed in claim 16 in which the crosslinker is a phenol formaldehyde, melamine formaldehyde, or polisocyanate.

18. A solventborne activated paint pack as claimed in claim 17 in which the crosslinker is a polyisocyanate.

19. A waterborne coating composition which comprises a dispersion in an aqueous medium of the solventborne activated paint pack as claimed in claim 16.

20. A process for producing a non crosslinker containing solventborne paint pack which can be made into a pigmented waterborne coating composition, comprising a polymer having hydrophilic groups and functional groups and a waterborne pigment dispersion, comprising the steps of:

i) forming a solution of the polymer in an organic solvent; and

ii) dispersing a waterborne pigment dispersion in the presence of a pigment dispersant in the polymer solution.

21. A process for producing a solventborne activated paint pack which can be made into an aqueous coating composition as claimed in claim 20 further comprising the steps of: additing to the solventborne paint pack a crosslinker which is soluble in the organic solvent; and forming a solution of the crosslinker in the solvent.

22. A process for producing an aqueous coating composition as claimed in claim 21 used to produce an aqueous coating composition further comprising the step of emulsifying the solventborne activated paint pack in an aqueous medium.

23. A process as claimed in claim 22 used to coat a substrate further comprising the step of applying a layer of a waterborne coating composition according to claim 22 to a surface of the substrate and thereafter causing or allowing the layer to cure.